Auburn
A Nederman Company

Wood Processing

A win for the PM 1 PRO and Auburn's excellent Customer Service

"We're more than happy with our leak detectors!"

Application

An engineered wood products facility operating multiple baghouses used Auburn PM 1 PRO particulate monitors to track emissions performance across several processes, including forming, sawline, sander, screening, and silo filtration systems.

In wood facilities, particulate monitoring plays a key role in early detection of baghouse leaks and process upsets. Without reliable monitoring, emissions can go undetected, leading to regulatory risk, increased maintenance costs, and potential safety concerns such as combustible dust hazards.

Challenge

The facility began experiencing intermittent diagnostic failures across multiple baghouse leak detection units. These issues included:

- Repeated zero check failures and signal quality test failures
- Inconsistent behavior where units would fail, reset, and then pass diagnostics temporarily
- Multiple baghouses experiencing failures on the same day, raising concerns about a systemic issue
- Difficulty isolating root causes despite cleaning probes and inspecting wiring

Additionally, the customer observed environmental influences:

- Increased alarms during high humidity, rain, or snow events
- Occasional particulate readings during heavy rainfall, despite high air velocity in the stacks
- Operational challenges also complicated troubleshooting
- Excess coaxial cable length (coiled during installation)
- No spare electronics module available for testing
- Need to maintain uptime during ongoing production and scheduled outages

Solution

Auburn worked closely with the customer to diagnose and resolve the issues through a combination of technical support, system adjustments, and operational guidance

Key actions included:

Data Analysis & Collaboration
- Customer shared historian data (particulate and differential pressure trends)
- Auburn reviewed baghouse performance during bag replacement and break-in periods

On-Site Support & Engineering Review
- Coordinated site visits with Auburn engineering to review system performance
- Recommended trending baseline signal levels as filter bags matured

Application Insight
- Identified that the monitor detects both particulate and liquid droplets (≥0.3 microns)
- Highlighted that moisture ingress (rain/ humidity) could influence readings

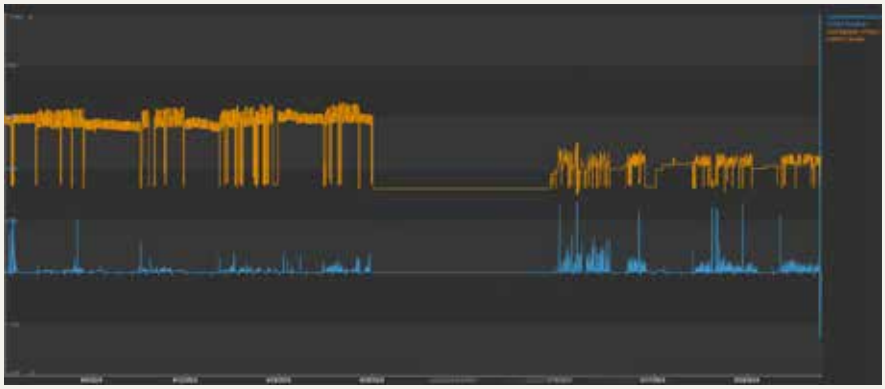
Results

Following troubleshooting, system adjustments, and continued support, the customer reported strong overall performance, noting that

"the units have been working great, and we are very pleased with them."

Diagnostic issues were reduced through threshold adjustments and a better understanding of system behavior, while the team gained improved visibility into baghouse performance during filter break-in as well as the impact of environmental conditions on readings. Any remaining issues, such as occasional particulate readings during heavy rainfall, were identified as minor and manageable, with the customer simply choosing to monitor more closely during inclement weather. Overall satisfaction remained high, reinforced by the customer's feedback:

"We're more than happy with our leak detectors!"



Continuous particulate emission monitoring across the filter bag cleaning cycle as detected by Auburn PM1PRO. Blue = Particulate, Orange= DeltaP

Featured Product

PM 1 PRO

Versatile single-point intrument designed for continuous particulate monitoring, delivering reliable performance across industries.

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